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EXAMINER
HOOSAIN, ALLAN

ART UNIT	PAPER NUMBER
2645	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/254,101	Applicant(s) KNITL ET AL.	
	Examiner Allan Hoosain	Art Unit 2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendment B, 9/4/01* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *19-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

FINAL DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 19-21, 25-27, 30 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **McCalmont** (US 5,915,010).

As to Claim 19, with respect to Figures 1 and 4A, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system that is called and controlled by communication terminal equipment of a communication network, the method comprising the steps of:

directly coupling the automatic call distribution system and the interactive voice response system (Figure 1, labels 110 to 180);

connecting both the interactive voice response system in the automatic call distribution system to a communication system of the communication network (Figure 1, labels 113 and 130);

connecting at least one agent communication terminal equipment to the communication system (Figure 1, label 124 and 120);

allocating the at least one agent communication terminal equipment to the automatic call distribution system (Figure 4A, label 411 and Col. 10, lines 25-27);

influencing the interactive voice response system by the communication terminal equipment wherein the interactive voice response system communicates a transfer (request) for reserving an available one of the at least one agent communication terminal equipment to the automatic call distribution system (Figure 4A, labels 404 and 410 and Col. 10, lines 27-30);

reserving, via the automatic call distribution system, the available one of the at least one agent communication terminal equipment (Col. 10, lines 40-43); and

transferring, given the request for reserving, and reservation of, the agent communication terminal equipment, the communication terminal equipment, from the interactive voice response system to the reserved agent communication terminal equipment (Figure 4A and Col. 10, lines 40-53).

As to claim 20, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 19, further comprising the steps of:

providing interfaces to both the interactive voice response system and the automatic call distribution system (Figure 1); and

coupling the respective interfaces of the interactive voice response system and the automatic call distribution system via a local area network (Figure 1, label 130 and Col. 4, lines 22-25).

As to Claim 21, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 19, further comprising the steps of:

interrogating a status of the agent communication terminal equipment by the interactive voice response system before the request for reserving is communicated (Col. 10, lines 40-43); and

implementing the request for reserving dependent on the interrogated status (Col. 10, lines 54-64).

As to Claim 25, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 19, further comprising the step of:

providing a request and an acknowledgment for each request for reserving between the interactive voice response system and the automatic call distribution system (Figure 4A, labels 411 and 412).

As to Claim 26, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 25, further comprising the step of:

providing request information associated with the request (Figure 4A, label 406),

the request information including a request function code (Figure 4A, label 404),

version information indicating a current version of the interactive voice response system communicating the request (Figure 4A, labels 410 and 411),

identification identifying the respective automatic call distribution system (Figure 4A, label 414),

identification identifying the respective interactive voice response system (Figure 4A, label 414),

reference information identifying the request (Figure 4A, label 414), and

at least one request-dependent parameter (Figure 4A, label 416).

As to Claim 27, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 25, further comprising the step of:

providing acknowledgment information associated with the request (Figure 4A, label 412),

the acknowledgment information including an acknowledgment function code (Figure 4A, label 416),

version information indicating a current version of the automatic call distribution system communicating the acknowledgment (Figure 4A, label 414),

identification identifying the respective automatic call distribution system (Figure 4A, label 414),

identification identifying the respective interactive voice response system (Figure 4A, label 404),

reference information identifying the acknowledgment (Figure 4A, label 418), and

at least one acknowledgment-dependent parameter (Figure 4A, label 416).

As to Claim 30, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 19, further comprising the steps of:

inserting service information, in a status request (Col. 10, lines 27-30 and Figure 5),

indicating a requested agent communication terminal equipment as a parameter (Figure 4A, label 410); and

communicating the status request, which includes the parameter, of

the associated automatic call distribution system from the interactive voice response system to the automatic call distribution system (Figure 4A, label 404).

As to Claim 35, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 19, further comprising the steps of:

inserting in a display request a parameter which includes at least one of agent identification identifying a specific agent communication terminal equipment (Figure 3a),

information to be displayed at the agent communication terminal equipment (Figure 3a),

an attention information effecting an attention tone at the affected agent communication terminal equipment (Figure 2, labels 208, 210,212 and Col. 7, lines 10-18); and

communicating the display request from the interactive voice response system to the automatic call distribution system (Figure 3b and Col. 7, lines 35-40).

4. Claims 22 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over **McCalmont** in view of **Morganstein et al**. (US 5,020,095).

As to Claim 22, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 19, further comprising the steps of:

McCalmont does not teach the following limitations:

(I) cyclically interrogating a status of the agent communication terminal equipment by the interactive voice response system before the request for reserving is communicated; and

(II) implementing the request for reserving dependent on the cyclically interrogated status

Morganstein teaches determining average waiting time(cyclically interrogating) for calls in a queue (Figure 2d and Col. 2, lines 8-15). Having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art, to add waiting time capability to **McCalmont's** invention as taught by **Morganstein's** invention for transmitting messages to callers about queue information.

As to claim 31, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 30, further comprising the step of:

communicating a status acknowledgment from the automatic call distribution system after the step of communicating a status request (Figure 4A, label 411 and 412),

wherein the status acknowledgment includes at least one of result information indicating a check of allowability of the status request (Figure 4A, label 416),

status information indicating an operating condition of the automatic call distribution system (Figure 4A, label 412),

agent information indicating the agent communication terminal equipment (Figure 4A, label 416),

report information indicating the agent communication terminal equipment (Figure 4A, label 410),

McCalmont does not teach the following limitations:

(I) busy information indicating the agent communication terminal equipment, and

(II) availability information indicating the availability of the agent communication terminal equipment.

Morganstein teaches determining average waiting time (busy and availability information) for calls in a queue (Figure 2d and Col. 2, lines 8-15). Having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art, to add waiting time capability to **McCalmont's** invention as taught by **Morganstein's** invention for transmitting messages to callers about queue information.

As to Claim 32, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 19, further comprising the step of:

inserting in the reservation request a parameter which includes at least one of service information requesting an arbitrary agent communication terminal equipment of a group of agent communication terminal equipment (Col. 10, lines 27-30 and Figure 3b),

McCalmont does not teach the following limitations:

(I) waiting information indicating a time span for waiting for one of a group of agent communication terminal equipment, and

(II) status information indicating one of the reporting and non-reporting of the status of the reservation request.

Morganstein teaches determining average waiting time (waiting and status information) for calls in a queue (Figure 2d and Col. 2, lines 8-15). Having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art, to add waiting time

capability to **McCalmont's** invention as taught by **Morganstein's** invention for transmitting messages to callers about queue information.

As to Claim 33, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 32, further comprising the step of:

communicating a reservation acknowledgment from the automatic call distribution system after the step of communicating a reservation request (Figure 4A, labels 411 and 412),

wherein the reservation acknowledgment includes at least one of event information indicating a check of allowability of the reservation request (Figure 4A, label 412),

service information indicating a group of agent communication terminal equipment (Figure 4A, label 410),

telephone number information indicating a telephone number of the agent communication terminal equipment (Figure 4A, label 408), and

agent status information indicating the status of the requested agent communication terminal equipment (Figure 2, label 210 and Figure 4A, label 414).

5. Claims 23-24 is rejected under 35 U.S.C. 103(a) as being unpatentable over **McCalmont** in view of **Williams et al**. (US 5,627,884).

As to Claims 23-24, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 19, further comprising the steps of:

McCalmont does not teach the following limitations:

(I) noting, given an unavailable agent communication terminal equipment, a call back request communicated from an associated communication terminal equipment in the interactive voice response system with telephone number information associated with the communication terminal equipment; and

(II) initiating an automatic call back with assistance from a further request for reserving, wherein a connection to the reserved agent communication terminal equipment is produced and transferred first and a call back connection to the associated terminal equipment is produced and transferred thereafter.

Williams teaches the limitations (Col. 1, lines 26-41). Having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art, to add call back capability to **McCalmont's** invention as taught by **Williams'** invention for reducing an organization's hold time expense.

6. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **McCalmont** in view of **Costello et al.** (US 4,510,351).

As to Claim 28, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 19, further comprising the steps of:

McCalmont does not teach the following limitations:

(I) inserting access protection information in a logon request;

(II) communicating the logon request to log the interactive voice response system on at the automatic call distribution system;

(III) inserting a check result of the logon request in a logon acknowledgment; and

(IV) answering the logon request by the automatic call distribution system with the logon acknowledgment.

Costello teaches the limitations (Figures 9-11 and Col. 2, lines 5-17, 47-51 and Col. 10, lines 10-58). Having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art to add agent status capability to **McCalmont's** invention as taught by **Costello's** invention in order to provide dynamic system operation.

As to Claim 29, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 19, further comprising the steps of:

McCalmont does not teach the following limitations:

(I) inserting access protection information in a log off request;

(II) communicating the log off request to log the interactive voice response system off at the automatic call distribution system;

(III) inserting a check result of the log off request in a log off acknowledgment; and

(IV) answering the log off request by the automatic call distribution system with the log off acknowledgment.

Costello teaches the limitations (Figures 9-11 and Col. 2, lines 5-17, 47-51 and Col. 10, lines 10-58). Having the cited art at the time the invention was made, it would have been

obvious to one of ordinary skill in the art to add agent status capability to **McCalmont's** invention as taught by **Costello's** invention in order to provide dynamic system operation.

7. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over **McCalmont** in view of **Morganstein et al**. and further in view of **Costello et al**. (US 4,510,351).

As to Claim 34, **McCalmont** teaches a method for incorporating functions of an automatic call distribution system in an interactive voice response system as claimed in claim 32, further comprising the steps of:

McCalmont does not teach the following limitations:

(I) inserting in a release request, as a parameter, an agent identification indicating the agent communication terminal equipment to be released; and

(II) communicating the release request from the interactive voice response system to the automatic call distribution system.

Costello teaches the limitations (Figures 9-11 and Col. 2, lines 5-17, 47-51 and Col. 10, lines 10-58). Having the cited art at the time the invention was made, it would have been obvious to one of ordinary skill in the art to add agent status capability to **McCalmont's** invention as taught by **Costello's** invention in order to provide dynamic system operation.

Response to Arguments

8. Applicant's arguments filed 9/4/01 have been fully considered but they are not persuasive because of the following:

McCalmont does not teach a VRU communicating a request for an agent.

Examiner respectfully disagrees. The cited passage at Col. 10, lines 25-30 teaches that the VRU obtains customer group data for forwarding the call. The cited passage at Col. 10, lines 40-43 teaches the ACD selects the available agent for handling the call. The passages in context teaches that VRU collected data is sent by the VRU to the ACD for the ACD to select the available agent in the appropriate customer group and then connect the call to the selected agent.

Contrary to the arguments, **McCalmont** does not only teach the VRU offering a caller additional information, but also collects information from the caller on which appropriate service group (agents) to connect the caller. If this were not the case, then the selected agent will not be able to process the call and provide further transfers (see also Col. 10, line 54 through Col. 11, line 15 and Figure 4B). In addition, Examiner's interpretation of **McCalmont's** teachings at Col.10, lines 40-43 that a caller is routed to an agent in an appropriate service group selected by a caller is supported by the teachings at Col. 11, lines 35-52.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jolissaint (US 5,740,240) teaches a vru which collects information from callers and routes callers to live agents.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any response to this final action should be mailed to:

Box AF
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or faxed to:
(703) 872-9314, (for formal communications; please mark "EXPEDITED PROCEDURE")
Or:
(703) 306-0377 (for customer service assistance)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Allan Hoosain** whose telephone number is (703) 305-4012. The examiner can normally be reached on Monday to Friday from 7 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Fan Tsang**, can be reached on (703) 305-4895.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Allan Hoosain

Allan Hoosain
Primary Examiner
11/16/01